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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,235	11/26/2003	Glen A. Oross	200300703-1	9174
22879	7590	06/30/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			SEVER, ANDREW T	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/723,235

Applicant(s)

OROSS ET AL.

Examiner

Andrew T. Sever

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12-19 and 21-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-19 and 21-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/25/2005</u> . | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> .           |

Continuation of Attachment(s) 6). Other: Complete copy of reference JP08-043943.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 4/25/2005 has been entered.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 1-10, 12-19, and 21-43 is withdrawn in view of the newly discovered reference(s) to Takanori (JP 08-043943). Rejections based on the newly cited reference(s) follow.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7-10, 12-19, 21-25 and 27-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Takanori (JP 08-043943).

Takanori teaches in figure 2a,

a portable projector, comprising

A light engine; and

A projector housing (1, 4, and 2) having a closed configuration (evidenced by the arrows that show opening and closing the case), in the closed configuration, the projector housing at least partially encloses the light engine (it appears to enclose it at all times), and in the open configuration, the projector housing supports the light engine in an upright orientation with the light engine suspended downward from the projector housing (as can clearly be seen the projector engine part 7 is suspended (hung) from the side wall in a downward direction, while the housing supports the light engine in an upright orientation, i.e. the projector housing sits on a surface with the light engine approximately pointing towards the ground.)

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*With regards to applicant's claim 2:*

Clearly one of ordinary skill in the art would recognize that when the casing is closed (both sides pushed together) it is much more compact.

*With regards to applicant's claim 3:*

Since in the compact state mirror 11 would not be pointed in the correct direction, the projector would largely been inoperative.

*With regards to applicant's claim 4:*

Figure 2b shows the optical components, which are clearly configured to be properly aligned for operation of the light engine.

*With regards to applicant's claim 5:*

Part 7 is a mirror, which is a type of reflective optics.

*With regards to applicant's claim 7:*

Clearly the light engine 7 has its own housing.

*With regards to applicant's claims 8 and 9:*

This is clearly met as shown in figure 2a.

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*With regards to applicant's claim 10:*

Figure 9 shows the light engine housing pivotally depending from the projector housing (it is turned to project out instead of reflecting off the mirror 14.)

*With regards to applicant's claim 12:*

See figure 2a, which clearly shows that the first and second portions (2 and 4 respectively) are pivotally connected for converting the projector housing to a closed and open configuration.

*With regards to applicant's claim 13:*

As can be clearly seen in the reference, conversion between the compact state and open state allows the light engine to be turned and expanded out (see figure 9).

*With regards to applicant's claim 14:*

Clearly the light engine housing is always partially attached to the projector housing.

*With regards to applicant's claim 15:*

The projector housing is clamshell in shape (it expands and contracts like a clam's shell does.)

*With regards to applicant's claim 16:*

Inherently the heat dissipation from the light engine is enhanced when the projector housing is in the open configuration as there is more space/air inside the projector to absorb the heat and according to the laws of thermodynamics this will result in better heat dissipation.

*With regards to applicant's claims 17 and 18:*

See above wherein the word "depends" is understood in the context of the rest of the claim to be synonymous with suspend.

*With regards to applicant's claim 19:*

In the configuration of figure 9 the projection optics are disposed adjacent the top of the light engine housing in the open configuration. (It can be argued that in all configurations the projection optics are disposed adjacent the top of the light engine housing, since they are attached to the top portion.)

*With regards to applicant's claims 21-25:*

See above.

*With regards to applicant's claims 27-37:*

The method of using and manufacturing the projector taught by Takanori is inherent given that it is useful and exists. (See MPEP 2112.02) With regards to applicant's



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claims 30-32 the image data for digital projectors generally comes from an image data source, which is at least partially processed by a computer, either integrated into the projector or separately in a device producing the images (for example a DVD player includes a small computer within it.)

*With regards to applicant's claims 38-43:*

See above wherein the parts described in the above apparatus claims corresponds to the means for doing their task.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takanori as applied to claims 1-5, 7-10, 12-19, 21-25 and 27-43 above, and further in view of Levis et al. (US 5,829,858 as cited in the previous office action mailed 12/28/2004.)

As described in more detail above Takanori teaches a portable projector which among other things comprises a light engine having optical components, however Takanori as provided by the applicant) does not teach what the optical components are made of.

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Levis teaches in figure 1 a light engine, which includes polymer refractive optics (Fresnel lenses see column 4 lines 55-64). Levis teaches in column 1 lines 36-47 as well as column 2 lines 25-44 that the light engine taught by Levis is an improvement over prior art light engines allowing for reduced "spillage" and better coverage of the entire image area, so that even the corners of a HDTV image are as bright as the center. Given that these are desirable goals in projecting, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the light engine of Levis, which includes polymer refractive elements in the projector and associated method of Takanori.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS

A handwritten signature in cursive script, appearing to read "Judy Nguyen".

**JUDY NGUYEN**  
**SUPERVISORY PATENT EXAMINER**